



STATE OF MARYLAND

# DMMH

Maryland Department of Health and Mental Hygiene  
300 W. Preston Street, Suite 202, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

## Office of Preparedness & Response

Sherry Adams, Director

Isaac P. Ajit, Deputy Director

August 24, 2012

## Public Health & Emergency Preparedness Bulletin: # 2012:33 Reporting for the week ending 08/18/12 (MMWR Week #33)

### CURRENT HOMELAND SECURITY THREAT LEVELS

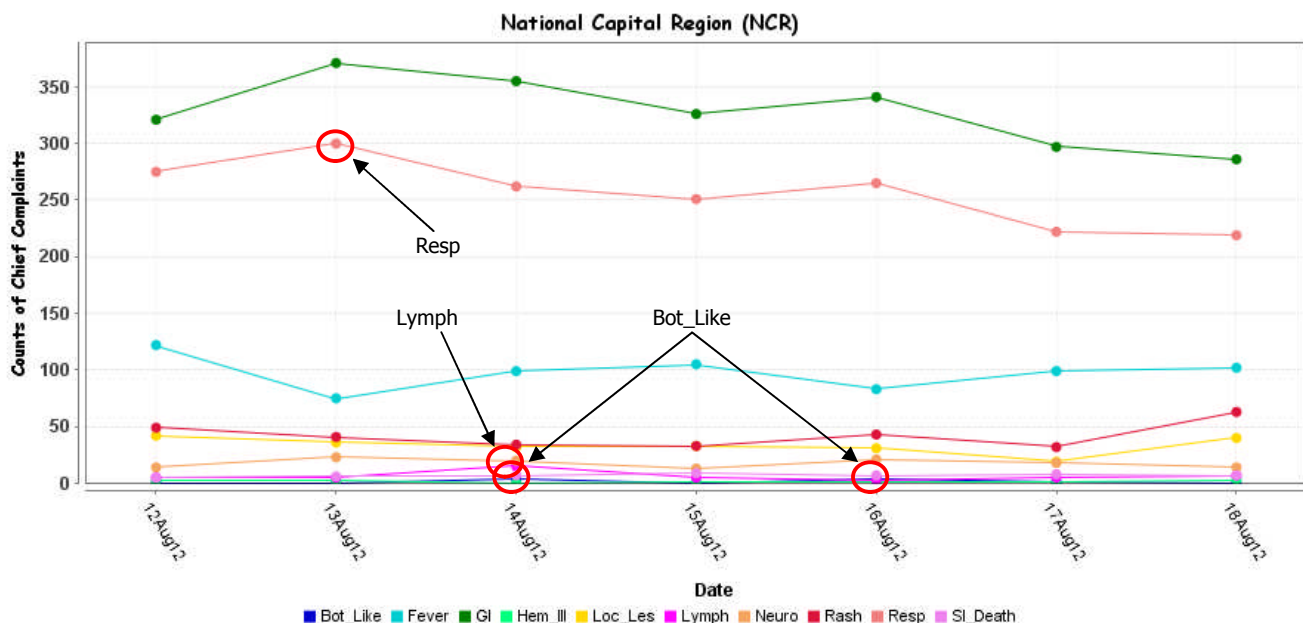
National: No Active Alerts  
Maryland: Level One (MEMA status)

### SYNDROMIC SURVEILLANCE REPORTS

#### ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

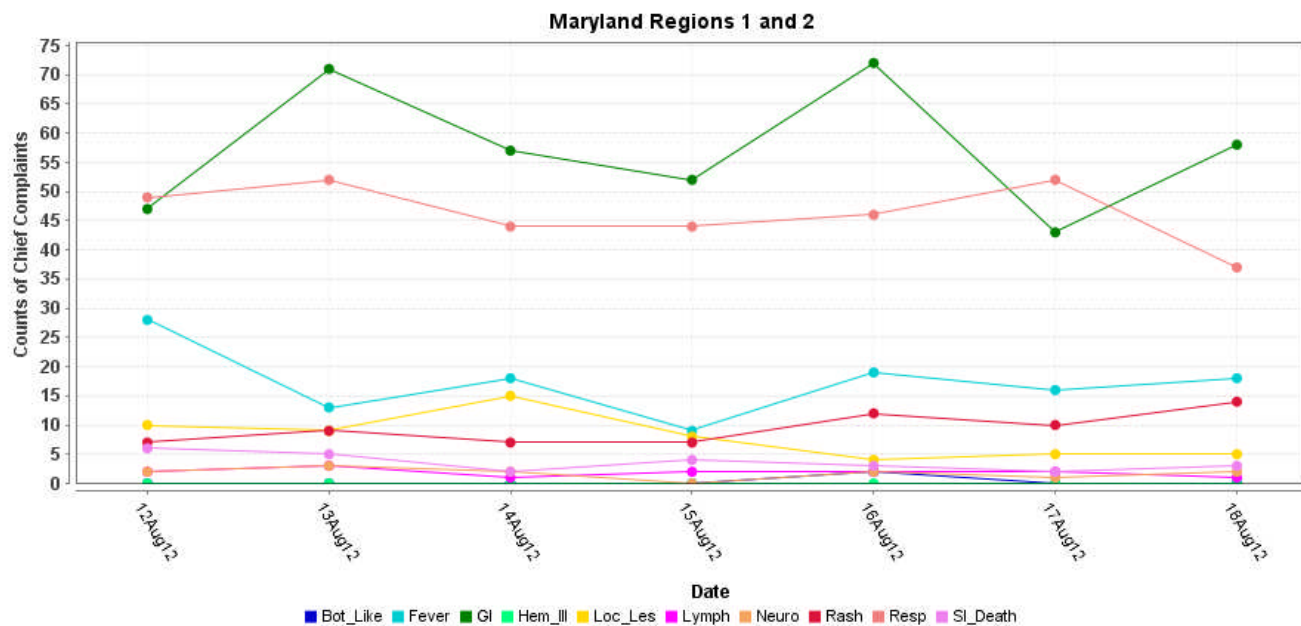
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

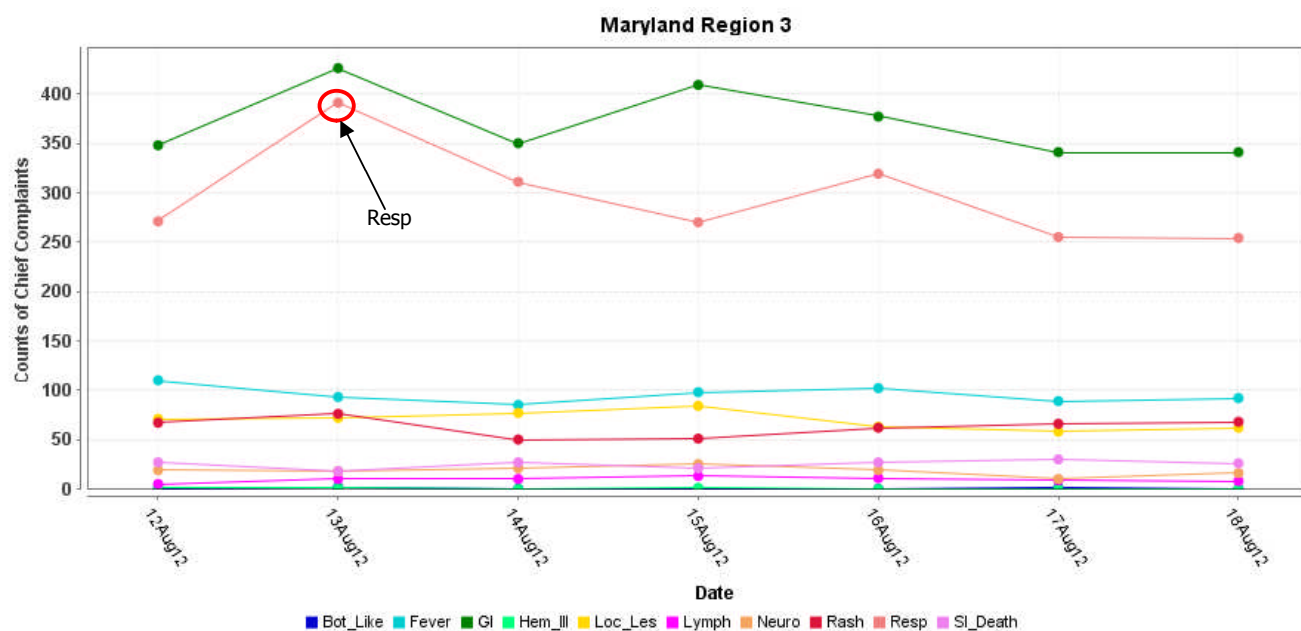


\*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

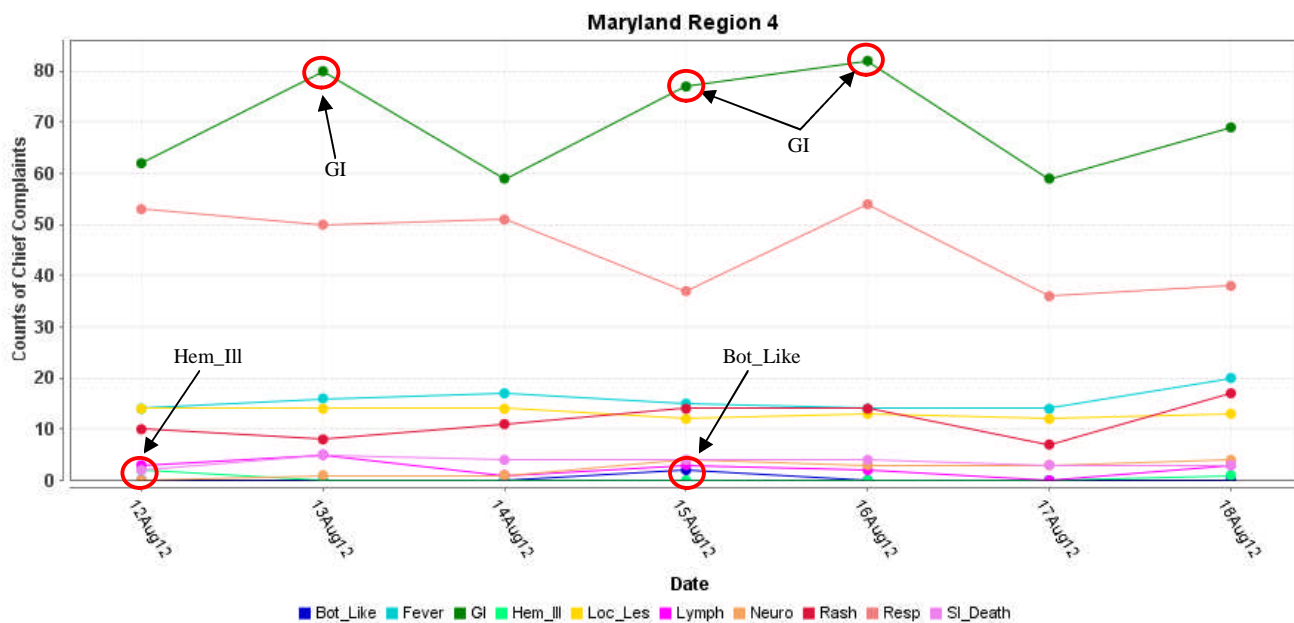
**MARYLAND ESSENCE:**



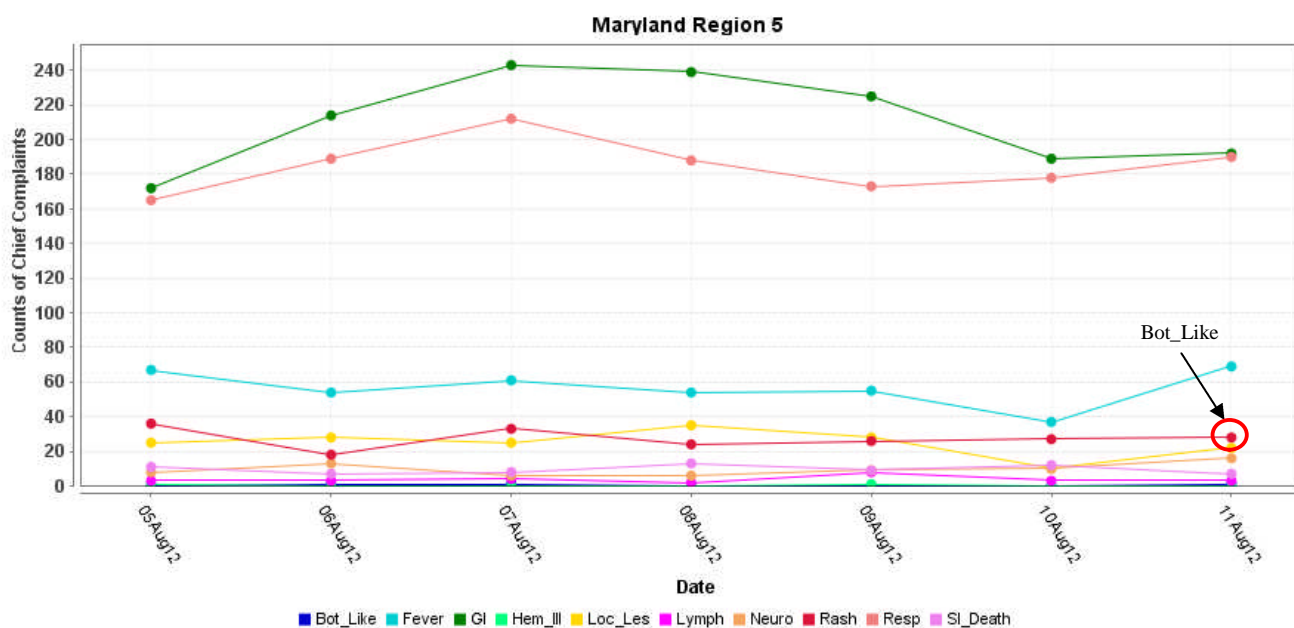
\* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



\* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



\* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

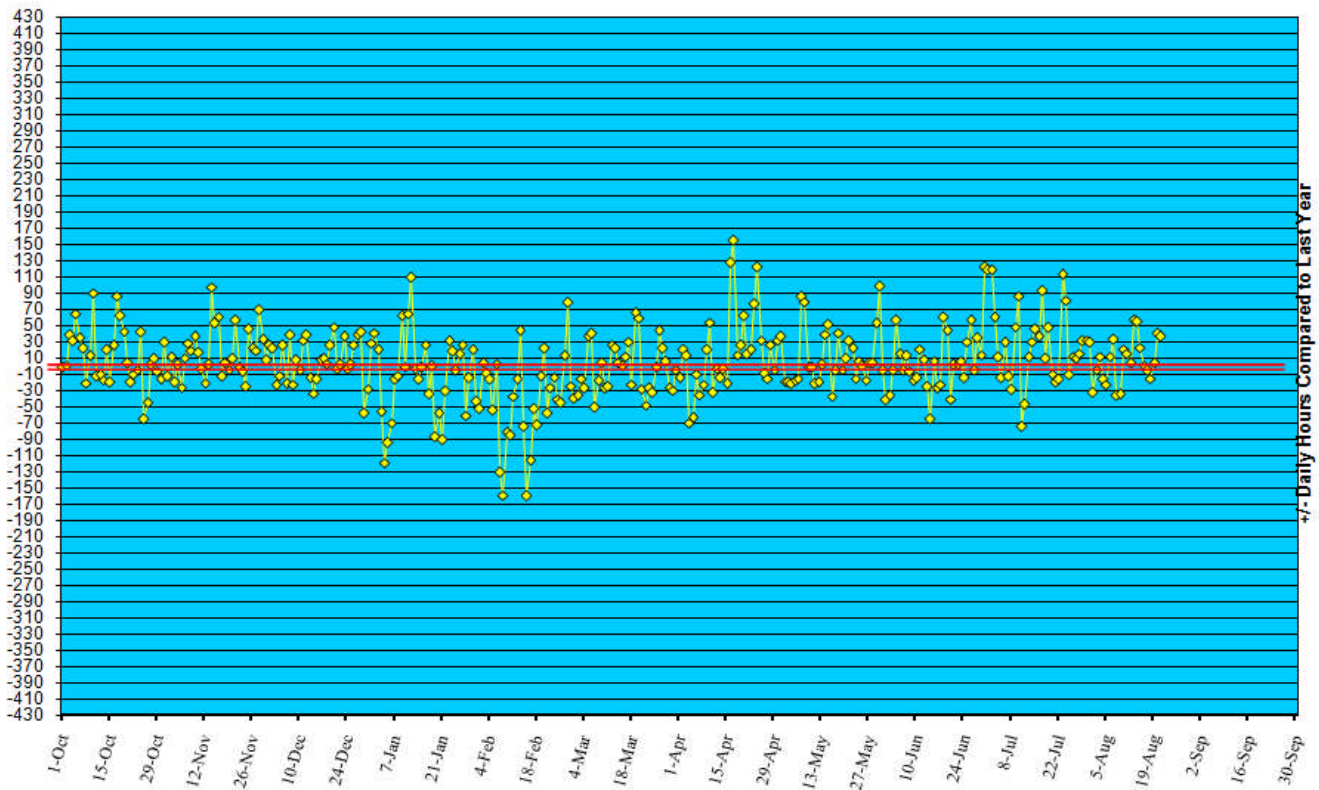


\* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

## **REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/11.

### **Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '11 to August 18, '12**



## **REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

## **MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in June 2012 did not identify any cases of possible public health threats.

## **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

### **COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

<b>Meningitis:</b>	<b><u>Aseptic</u></b>	<b><u>Meningococcal</u></b>
New cases (August 12 – August 18, 2012):	21	0
Prior week (August 5 – August 11, 2012):	12	0
Week#33, 2011 (August 13 – August 19, 2011):	22	0

1 outbreak was reported to DHMH during MMWR Week 33 (August 12 – August 18, 2012)

1 Respiratory illness outbreak

1 outbreak of INFLUENZA associated with a Fair

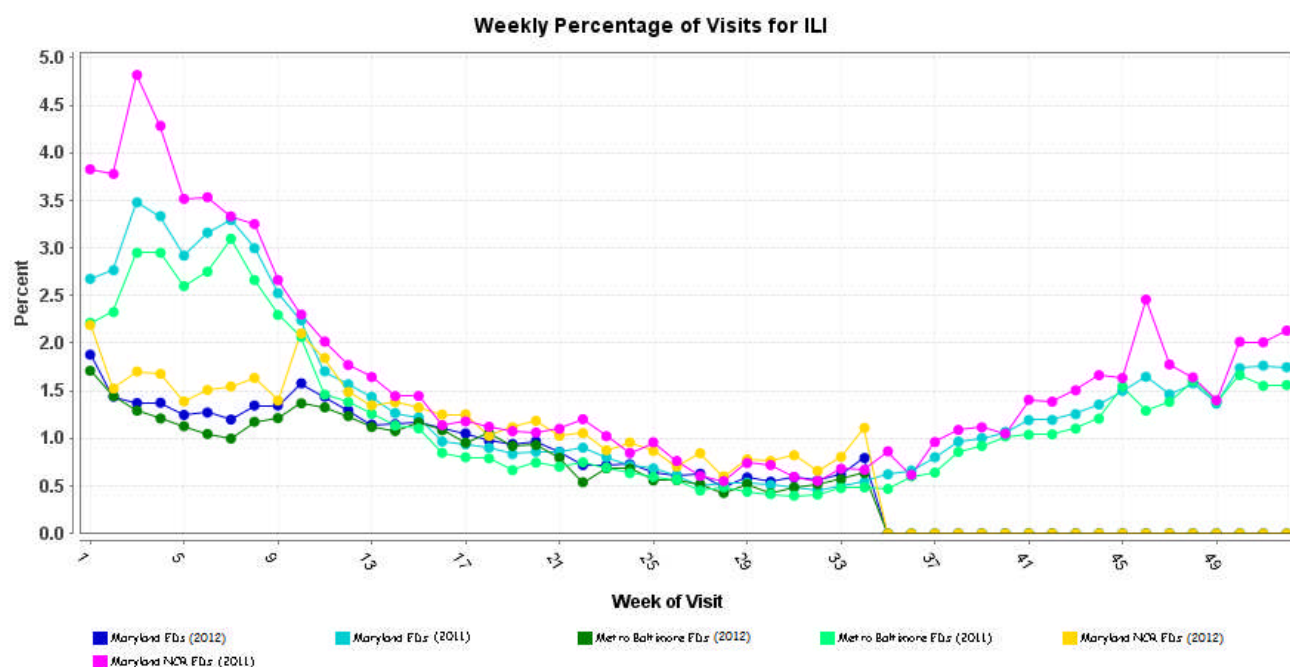
**MARYLAND SEASONAL FLU STATUS**

Seasonal Influenza reporting occurs October through May.

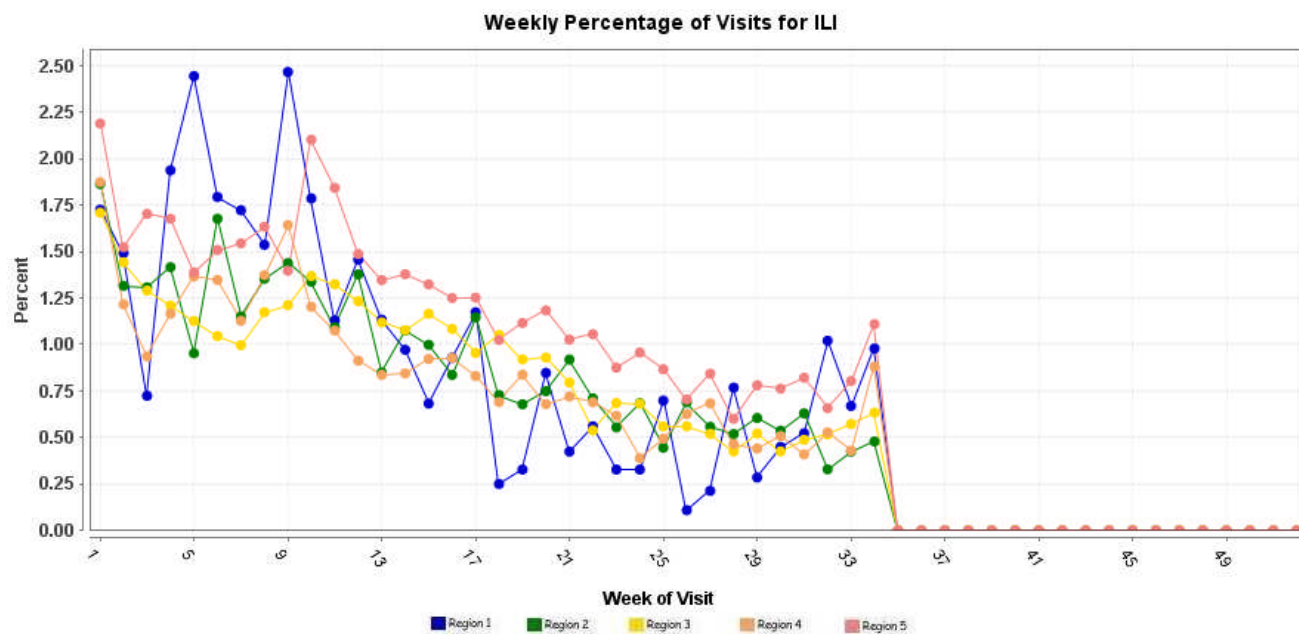
**SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS**

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



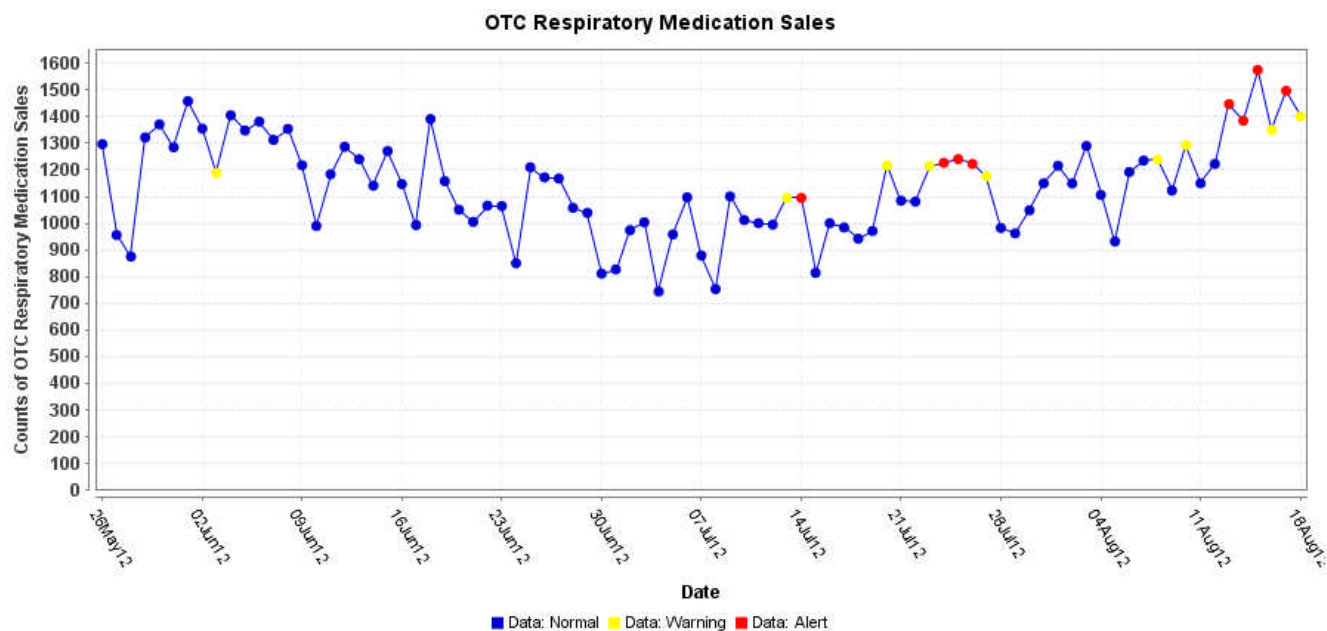
\* Includes 2011 and 2012 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



\*Includes 2012 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

#### OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of August 10, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 608, of which 359 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

**AVIAN INFLUENZA (INDONESIA):** 10 July 2012, The Ministry of Health of Indonesia has notified the WHO of a new case of human infection with avian influenza A (H5N1) virus. The case is a 37-year-old male from Yogyakarta province. He developed fever on 24 Jul 2012, was hospitalized on 27 Jul 2012 and died on Mon 30 Jul 2012. Epidemiological investigation on the case found that the case had 4 pet caged birds in his home, which is about 50 metres [54.6 yards] from a poultry slaughter house and near a farm. Infection with avian influenza A(H5N1) virus was confirmed by the National Institute of Health Research and Development (NIHRD), Ministry of Health and reported to WHO by the National IHR Focal Point. To date, the total number of human influenza A(H5N1) cases in Indonesia is 191 with 159 fatalities, 8 (all fatal) of which occurred in 2012.

## **NATIONAL DISEASE REPORTS\***

**SALMONELLOSIS (KENTUCKY):** 17 August 2012, The Department for Public Health (DPH) today, 17 Aug 2012, reported that cantaloupes tested in the state public health laboratory carry the same strain of salmonella associated with a statewide outbreak that health officials say is still ongoing. The salmonellosis outbreak, which has sickened at least 50 Kentuckians and been associated with 2 deaths, began in early July 2012. Through an epidemiological investigation and confirmatory lab testing, Kentucky public health officials determined that cantaloupes, which evidence indicates were grown in south western Indiana but purchased in Kentucky, carried the same strain determined to be the cause of an ongoing outbreak of infection. Salmonellosis cases caused by the outbreak strain have also been reported in other states. In addition, investigation is also continuing into other clusters of salmonella cases in Kentucky, which may be linked to cantaloupe or watermelon consumption. "Foodborne illness is a serious threat to public health. Consumers are advised to avoid eating cantaloupes from south western Indiana, especially if they are at heightened risk for complications from salmonella infection," said acting public health commissioner Steve Davis, MD. "In addition, health care providers are encouraged to be mindful of patients who may have symptoms consistent with salmonellosis and report all cases to the local health department." CDC is collaborating with public health officials in affected states and the Food and Drug Administration (FDA) to investigate the ongoing outbreak, including tracing the source of the affected melons and shipments of melons that may have been contaminated. A likely source of the outbreak is cantaloupes grown in southwestern Indiana region and distributed to stores in Kentucky. No Kentucky-grown cantaloupes have been associated with this outbreak. Salmonella can occasionally be found on contaminated produce items, so all produce should be thoroughly washed and scrubbed before eating. In general, the FDA recommends thoroughly washing and scrubbing the rinds of all cantaloupes and melons prior to cutting and slicing, and to keep sliced melons refrigerated prior to eating. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**VIBRIO VULNIFICUS (FLORIDA):** 14 August 2012, Hillsborough County (FL) health officials have issued a warning about a potentially deadly bacterium that can be contracted from eating raw or undercooked oysters or swimming in local waters with open wounds. According to the Hillsborough County Health Department, 2 Hillsborough residents have died in 2012 from *Vibrio vulnificus* infections and 5 other cases have been reported in the county. The organism *Vibrio vulnificus* occurs naturally [especially] in coastal areas of the Gulf of Mexico, Atlantic and Pacific Oceans. It is especially common during the summer months when water temperatures are warmer. Infections are most often due to consumption of raw oysters and other undercooked raw shellfish. They can also result from exposure of open wounds or sores to seawater. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**SALMONELLOSIS (NEBRASKA):** 13 August 2012, South Heartland District Health Department along with the Nebraska Department of Health and Human Services is investigating an outbreak of salmonellosis associated with the Blue Hill Care Center in Webster County. To date, there have been 17 confirmed cases and 2 probable or suspected cases reported in residents, staff, or visitors. 4 residents were temporarily hospitalized after showing symptoms. A visitor is still hospitalized. Blue Hill Care Center is cooperating fully with the investigation to help identify the source and eradicate the issue. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

## **INTERNATIONAL DISEASE REPORTS\***

**EBOLA HEMORRHAGIC FEVER (CONGO):** 18 August 2012, On 17 Aug 2012, the Ministry of Health (MoH) of the Democratic Republic of Congo (DRC) notified the World Health Organization (WHO) of an outbreak of Ebola fever in the Isiro and Dungu Health Zones of Province Orientale in Eastern DRC. A total of 10 suspected cases (9 in Isiro and 1 in Dungu) and 6 deaths (5 deaths in Isiro and 1 in Dungu) have been reported. Laboratory investigations conducted at the Uganda Virus Research Institute (UVRI), Entebbe, Uganda, confirmed Ebola virus (Bundibugyo species). Three samples taken from two patients turned out positive for Ebola virus. A National Task Force convened by the Congolese Ministry of Health, is working with several partners including WHO, MSF, and CDC. A joint MoH, WHO, and MSF emergency response team are in the field to conduct a detailed epidemiological investigation and case management. WHO is supporting the Ministry of Health in the areas of coordination, surveillance, epidemiology, laboratory, case management, logistics for outbreak, public information, and social mobilization. An additional team of experts from Congo, DRC, and IST/Gabon comprised of an epidemiologist, a logistician, an anthropologist, and social mobilisation officers are being mobilized for possible deployment in the field. Control activities that are being carried include active case finding and contact tracing, enhanced surveillance, case management, public information, and social mobilization and reinforcing infection control practices. WHO does not recommend that any travel or trade restrictions be applied to Democratic Republic



of Congo. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) \*Non-suspect case

**E. COLI EHEC (JAPAN):** 18 August 2012, 6 have died and more than 100 have fallen ill in Hokkaido as of 17 Aug 2012 due to food poisoning caused by *Escherichia coli* O157 found in pickled cabbage. Residents at 9 nursing homes in Sapporo and elsewhere in Hokkaido account for most of the cases, and 5 women in their 80s to 100s have died. In Sapporo, a 4 year old girl died on 11 Aug 2012. The food poisoning was attributed to lightly pickled Chinese cabbages shipped 29-30 July 2012 by a Sapporo-based food manufacturer. The Sapporo municipal health center said the raw ingredients may not have been sufficiently sterilized. Cases of food poisoning from vegetables are much less common than those attributable to meat, fish, and shellfish, but have occurred from time to time. Lightly pickled vegetables require more caution than other types of pickles because their manufacturing process involves no heating or fermentation that would kill bacteria, experts said. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN):** 13 August 2012, With the death of a 42 year old shepherd from Karachi, who recently passed away at a private hospital from Crimean-Congo hemorrhagic fever (CCHF), the number of people who have succumbed to the disease reached 5, health officials said. Prior to his death, 4 other patients -- mainly livestock farmers from Balochistan -- had been brought to the city's private hospitals and had died from CCHF, the deadly viral disease that is transmitted from animals to humans. The Provincial Dengue Surveillance Cell, which monitors viral disease outbreaks, was reluctant to talk about the disease as they believed it would spread panic among the people. However, its officials said that so far, 5 patients had died at Karachi's hospitals this year, and their laboratory analysis confirmed that they were suffering from CCHF. Apart from the 42 year old shepherd, a 50 year old man died in the 1st week of January this year 2012], a 17 year old died in April, a 22 year old succumbed to the disease in May, and a 45 year old expired in June. 2 of these patients were admitted to the Aga Khan Hospital and one each to the National Institute of Blood Diseases (NIBD), Liaquat National Hospital (LNH), and Patel Hospital. It is worth mentioning here that only Aga Khan Hospital had the facilities to diagnose CCHF virus through laboratory tests and samples of all the patients were sent for analysis and confirmation. Experts said the viral disease is spread through a tick found on animals and people who deal with dairy farming and livestock were the most likely to catch the deadly virus. Affected patients would become seriously ill from fever, shortness of breath, and hemorrhage and unfortunately, there was no vaccine available to prevent people from falling victim. Pakistan had been battling with CCHF cases since 2000 and ever since, dozens of patients had died, yet many believed that health authorities were not taking the threat seriously. Experts urged the launch of an awareness campaign about the mode of transmission from animals to humans as thousands of people earned their livelihood through dairy and livestock farming. They added that people needed to be told about precautions that could be taken to protect them from the condition. Similarly, more facilities to diagnose the disease were needed in the provinces of Khyber-Pakhtunkhwa and Balochistan as well as well as specialised centers to manage the patients, who often used traditional methods to overcome the illness due to ignorance and lack of knowledge. A specialised training program for general practitioners should also be launched in all the provinces of the country so that they could refer patients immediately to tertiary-care hospitals in the country. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) \*Non-suspect case

\*National and International Disease Reports are retrieved from <http://www.promedmail.org/>.

## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website:  
<http://preparedness.dhmm.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmm.maryland.gov/flusurvey>

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Zachary Faigen, MSPH  
Biosurveillance Epidemiologist  
Office of Preparedness and Response  
Maryland Department of Health & Mental Hygiene  
300 W. Preston Street, Suite 202  
Baltimore, MD 21201  
Office: 410-767-6745  
Fax: 410-333-5000  
Email: [ZFaigen@dhmh.state.md.us](mailto:ZFaigen@dhmh.state.md.us)

Anikah H. Salim, MPH, CPH  
Biosurveillance Epidemiologist  
Office of Preparedness and Response  
Maryland Department of Health & Mental Hygiene  
300 W. Preston Street, Suite 202  
Baltimore, MD 21201  
Office: 410-767-2074  
Fax: 410-333-5000  
Email: [ASalim@dhmh.state.md.us](mailto:ASalim@dhmh.state.md.us)



## Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

**Table: Text-based Syndrome Case Definitions and Associated Category A Conditions**

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF  ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

**Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents**  
(continued from previous page)

<b>Syndrome</b>	<b>Definition</b>	<b>Category A Condition</b>
Respiratory	<p>ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)</p> <p>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus</p> <p>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis</p> <p>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain</p> <p>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE <i>acute exacerbation</i> of chronic illnesses.)</p>	<p>Anthrax (inhalational)</p> <p>Tularemia</p> <p>Plague (pneumonic)</p>
Neurological	<p>ACUTE neurological infection of the central nervous system (CNS)</p> <p>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis</p> <p>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS</p> <p>ACUTE non-specific symptoms of CNS infection such as meningismus, delirium</p> <p>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's</p>	Not applicable
Rash	<p>ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)</p> <p>SPECIFIC diagnosis of acute rash such as chicken pox in person &gt; XX years of age (base age cut-off on data interpretation) or smallpox</p> <p>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem</p> <p>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheic dermatitis, rosacea</p> <p>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema</p>	Smallpox
Specific Infection	<p>ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)</p> <p>INCLUDES septicemia from known bacteria</p> <p>INCLUDES other febrile illnesses such as scarlet fever</p>	Not applicable

**Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents**  
(continued from previous page)

<b>Syndrome</b>	<b>Definition</b>	<b>Category A Condition</b>
Fever	<p>ACUTE potentially febrile illness of origin not specified</p> <p>INCLUDES fever and septicemia not otherwise specified</p> <p>INCLUDES unspecified viral illness even though unknown if fever is present</p> <p>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome</p>	Not applicable
Severe Illness or Death potentially due to infectious disease	<p>ACUTE onset of shock or coma from potentially infectious causes</p> <p>EXCLUDES shock from trauma</p> <p>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births</p> <p>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths</p>	Not applicable